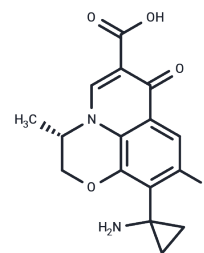


Pazufloxacin

Chemical Properties

| | |
|-------------------|---|
| CAS No. : | 127045-41-4 |
| Formula: | C ₁₆ H ₁₅ FN ₂ O ₄ |
| Molecular Weight: | 318.3 |
| Storage: | Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA. |



Biological Description

| | |
|---------------|---|
| Description | Pazufloxacin (T-3761) is a fluoroquinolone antibiotic used for antibacterial applications. This novel quinolone derivative exhibits robust and broad-spectrum antibacterial efficacy against systemic, pulmonary, and urinary tract infections in mice, effectively targeting both gram-positive and gram-negative bacteria, including quinolone-resistant strains such as <i>Serratia marcescens</i> and <i>Pseudomonas aeruginosa</i> . Compared to antibiotics like ofloxacin, ciprofloxacin, norfloxacin, and tosufloxacin, Pazufloxacin demonstrates comparable or superior efficacy across various infection models. While slightly less effective than tosufloxacin against certain gram-positive infections, it remains potent against methicillin-resistant <i>Staphylococcus aureus</i> . Its broad-spectrum activity is supported by minimum inhibitory concentrations (MICs) between 0.39 and 6.25 micrograms/ml for <i>Staphylococcus aureus</i> and <i>Clostridium</i> species, with minimum bactericidal concentrations (MBCs) close to the MICs. Additionally, its 50% inhibitory concentrations for DNA gyrases from <i>E. coli</i> and <i>P. aeruginosa</i> are 0.88 and 1.9 micrograms/ml respectively, highlighting its potent antibacterial mechanism of action. |
| Targets(IC50) | Others, Antibacterial, Antibiotic, DNA/RNA Synthesis |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|-------|-----------|------------|------------|
| 1 mM | 3.1417 mL | 15.7085 mL | 31.4169 mL |
| 5 mM | 0.6283 mL | 3.1417 mL | 6.2834 mL |
| 10 mM | 0.3142 mL | 1.5708 mL | 3.1417 mL |
| 50 mM | 0.0628 mL | 0.3142 mL | 0.6283 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481